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EXAMINER

WANG, SHENGJUN

ART UNIT PAPER NUMBER

1617

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**MAILED**  
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**GROUP 1600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/929,075  
Filing Date: August 15, 2001  
Appellant(s): AUWETER ET AL.

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Daniel S. Kim  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed October 4, 2004.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is incomplete. A complete statement of the status of the claims is as follows:

Claims 1-19 are currently pending in the application. Claims 11-18 have been withdrawn from consideration by the examiner after a restriction requirement was imposed; claims 1-10 and 19 stand rejected and are the subject of the instant appeal.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

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The rejection of claims 1-10 and 19 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

US Patent 5,780,056	Akamatsu et al.	July 14, 1998
US Patent 5,648,564	Ausich et al.	July 15, 1997
US Patent 5,382,714	Khachik	January 17, 1995
US Patent 4,522,743	Horn et al	June 11, 1985

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1-10 and 19 are rejected under 35 U.S.C. 103(a)

These rejections are fully set forth in prior office action mailed April 9, 2003, and reiterated herein.

**(11) *Response to Argument***

1. Claims 1-10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akamatsu et al. (US 5,780,056, IDS), in view of Khachik (US 5,382,714), Ausick et al. (5,648,564) and Horn et al. (US 4,522,743, equivalent to EP 065,193)

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2. Akamatsu et al. teach microcapsules of multi-core structure comprising natural carotenoids for additive agents for food and pharmaceuticals. The core particles contain the natural carotenoid, and have a particle size of 0.01 to 5  $\mu\text{m}$ . The microcapsules have mean particles size of 50 to 3,000  $\mu\text{m}$ . See, particularly, col. 1, lines 6-16, lines 35-42, col. 2, lines 43-58, col. 4, line 45 to col. 5, line 23. The particular example of natural carotenoid is palm oil carotenoid comprising beta-carotene and lycopene. See, col. 1, lines 35-42. Akamatsu et al. also teaches that various methods could be used for obtaining the particles, and the method of preparing the particle is not critical. See, col. 5, line 8 to col. 6, lines 21. The multi-core microcapsules provide protection of the carotenoid from oxidation. See the abstract.
3. Akamatsu et al. do not teach expressly that at least two core of the multi-core structure have different chemical composition, or only one representative in the core, or lutein is one of the carotenoid.
4. However, Khachik, and Ausich et al. teaches that lutein is particularly useful in nutritional, food composition. See, particularly, the abstract, and the claims. Horn teaches method of preparing finely divided pulverulent carotenoid or retinoid composition in which the carotenoid or retinoid essentially has a particle size of less than 0.5 micron. See, particularly, the abstract, and the claims.

Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to further incorporated lutein fine particle into the multi-core microcapsules.

A person of ordinary skill in the art would have been motivated to further incorporated lutein fine particle into the multi-core microcapsules because lutein is known to be similarly

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useful as a nutritional ingredients. It is prima facie obvious to combine two compositions each of which is taught in the prior art to be useful for same purpose in order to form third composition that is to be used for very the same purpose; idea of combining them flows logically from their having been individually taught in prior art; thus, the claimed invention which is a combination of two known nutritional ingredients sets forth prima facie obvious subject matter. See In re Kerkhoven, 205 USPQ 1069. One of ordinary skill in the art would have been reasonably expected to be able to make the finely divided particles since such method is known in the art. It is also obvious to make each and every carotenoid in the microcapsules into finely divided particles separately before incorporated them into the multi-core structure because method of making such finely divided particle is known in the art. Further, making active ingredients in one core, or in separated cores is an obvious variation, absent evidence to the contrary. Finally, the optimization of the amount of each and every active ingredient in a composition is considered within the skill of artisan, absent evidence to the contrary. The employment of the multicore microcapsules comprising carotenoid in food, pharmaceuticals, or nutritional products is obvious since such microcapsules are known to be useful for food, pharmaceuticals, or nutritional products.

5. In response to appellants' argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392,

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170 USPQ 209 (CCPA 1971). Particularly, the cited references teach the usefulness of various carotenoids as food or pharmaceutical ingredients, teach a method of making fine particles of carotenoids, and teach multiple cores structure for carotenoids. It is therefore obvious to make a multiple core structure containing various carotenoids by incorporating various fine particles of carotenoids in to the multiple core structure. Such obviousness does not rely on any of the applicants' disclosure. As stated in the prior office action, "the claimed invention which is a combination of two known nutritional ingredients sets forth prima facie obvious subject matter. See In re Kerkhoven, 205 USPQ 1069." A prima facie case has been established.

As to the remarks that the claimed invention provide some benefits, such as decrease unwanted interactions between the active compounds, etc (page 3, the last two paragraphs of the response), it appears that appellants are claiming unexpected benefit. Regarding the establishment of unexpected results, a few notable principles are well settled. It is applicant's burden to explain any proffered data and establish how any results therein should be taken to be unexpected and significant. See MPEP 716.02 (b). The claims must be commensurate in the scope with any evidence of unexpected results. See MPEP 716.02 (d). Further, applicants must compare the claimed subject matter with the closest prior art in order to be effective to rebut a prima facie case of obviousness. See, MPEP 716.02 (e). Furthermore, Attorney argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just

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attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness.”). There is no evidence of unexpected results on the record to support the claimed invention. All the evidence and arguments on the record have been fully considered. The examiner has not simply dismissed the alleged unexpected results.

Appellants erred in stating: “multiple core structure shown in the prior art contains only one active ingredient.” Akamatsu et al. specifically state “The natural carotenoid which can be used herein includes palm oil carotenoid, donariera algae carotenoid, carrot carotenoid, alfalfa carotenoid, corn carotenoid, and tomato carotenoid alone or in admixture of two or more. It is preferred that at least two carotenoids selected from a-carotenoid, b-carotenoid, r-carotenoid, and lycopene be contained.” Col. 3, lines 22-32. Possessing this teaching, and in view the fact that individual carotenoids are available as fine particle, it would have been obvious to incorporate different carotenoid particles in to a multiple core structure.

Further, as to the alleged benefit herein, it is well settled that “As long as some motivation or suggestion to combine the references is provided by the prior art taken as whole, the law does not require that the references be combined for the reason contemplated by the inventor.” *In re Beattie* 24 USPQ2d 1040 (Fed. Cir. 1992).

For the above reasons, it is believed that the rejections should be sustained.



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Respectfully submitted,

Shengjun Wang  
Primary Examiner  
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February 1, 2005

Conferees

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